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July 15, 2019

BY ECFS

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20554

Re: Notice of Ex Parte Letter of ACA Connects, GN Docket No. 18-122

Dear Ms. Dortch:

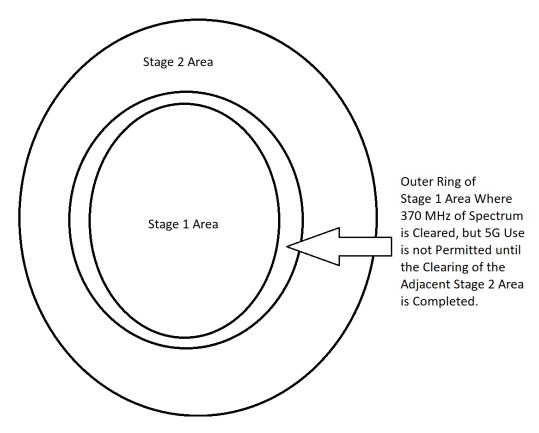
ACA Connects – America's Communications Association ("ACA Connects") submits this letter to answer a question posed by Commission staff in connection with one aspect of the proposal for refarming the C-band that it has submitted for the Commission's consideration. ACA Connects' proposal would, among other things: clear at least 370 MHz of C-band spectrum in an expedited time frame for use by next generation wireless services; transition video programmers and multichannel video programming distributor earth station users from C-band delivery to terrestrial fiber video delivery; make whole and incentivize stakeholders; and benefit the public.²

ACA Connects estimates that the transition to fiber can be accomplished within eighteen months in urban areas (Stage 1), within three years in the majority of the remaining areas (Stage 2), and within five years for a few hard-to-reach areas (Stage 3). The staggering of the transition among different types of areas means that, for a limited period of time, urban areas where the lower 370 MHz of the band has been cleared will neighbor areas where that spectrum is still used to

¹ See Letter from Pantelis Michalopoulos and Georgios Leris, Counsel for ACA Connects – America's Communications Association, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 (July 9, 2019).

² See Letter from Ross Lieberman, ACA Connects – America's Communications Association, Alexi Maltas, Competitive Carriers Association, and Elizabeth Andrion, Charter Communications, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 (July 2, 2019) ("Joint Proposal").

provide satellite service to earth stations. This in turn gives rise to the need to take some temporary measures to avoid interference from 5G base stations and mobile handsets operating in Stage 1 areas to C-band earth stations in later-stage areas that are located close to the border of Stage 1 areas. This interference scenario is not new—variants of it occur near the border whenever two providers of a ubiquitous service operate on the same spectrum in contiguous territories. To resolve it, ACA Connects proposes a temporary "outer ring" within the boundaries of cleared areas to avoid interference from mobile handsets into yet-to-be cleared areas, and a power flux-density ("PDF") limit on base stations. These temporary restrictions can be prescribed as conditions on the new 5G licenses.³



Specifically, for 5G mobile handsets operating within the cleared Stage 1 area, there would be a defined outer ring just within the boundary of that area, in which measures would be taken to avoid harmful interference from the mobile handsets into the C-band earth stations still operating co-frequency in yet-to-be cleared areas. The outer ring would only be necessary along the portion of the perimeter of Stage 1 areas that neighbor later-stage areas. Within that ring, 5G mobile handsets would be required to "roam" to other frequencies to avoid interference with the ongoing C-band satellite operations in later-stage areas. The width of that ring could be a constant value corresponding to worst-case propagation assumptions, or it could be a value

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³ See, e.g., 47 U.S.C. § 303(r) (giving the Commission the authority to "[m]ake such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this chapter[.]").

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specific to the topography of that portion of the cleared 5G geographic area. As C-band satellite operations in the lower 370 MHz of the band cease, the outer ring protection requirement would be removed, allowing increased flexibility to 5G licensees.

As for 5G base stations operating near the edge of a cleared Stage 1 area, there would be a PFD limit at the boundary with yet-to-be cleared areas. The PFD limit would be set at a level that prevents harmful interference from those base stations into the C-band earth stations operating in later-stage areas—i.e., where a 5G base station's antenna beams are directed towards neighboring later-stage areas. Again, as C-band satellite operations in the lower 370 MHz cease, the PFD limit would be removed, allowing increased flexibility to 5G licensees.

The measures described above would also apply temporarily to avoid interference near the border of any already-cleared Stage 2 and still-uncleared Stage 3 areas.

In sum, temporary outer rings and PDF limits will help enable the refarming of 370 MHz on an area-by-area basis, such as in urban areas where the proposal calls for a transition to 5G in eighteen months—ensuring more spectrum more quickly than under the plan put forward by the C-Band Alliance.

Respectfully submitted,

/s/

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